BOOK REVIEWS.

AN INTRODUCTION TO THE STUDY OF THE NERVOUS SYSTEM. By E. E. Hewer and G. N. Sandes. C. B. Mosby Co., 1929. pp. 104.

This is an extremely valuable adjunct to the existing text-books on the nervous system. It is designed to supplement the gross and microscopic descriptions found in the usual sources. The outcome of many years of teaching experience, it lays its emphasis on the important neuronal connections within the central nervous system. Clear and, on the whole, adequate diagrams of the neuronal elements of the chief functional systems are presented. The descriptive matter is well organized in outline form but suffers somewhat from abbreviation. A greater consideration of the relation between neuronal mechanisms and pathological states would probably have vivified the material. The authors are to be congratulated on an extremely useful contribution to the teaching of neuroanatomy.

H. S. BURR.

THE HISTORY OF HEMOSTASIS. By Samuel Clark Harvey. Paul B. Hoeber, Inc., New York, 1929, pp. 128.

Hemostasis is traced from the primitive man's realization that unchecked bleeding meant death up to Lister's experiments developing the present day absorbable ligature. The early Greeks and Romans used vegetable and mineral styptics on wounds received in battle; it was with these that Macheon ministered to Menelaus before the walls of Troy. Then the early surgeon began to make intentional incisions, but avoiding the blood vessels as they were uncovered. Not content with their own domain the Greeks invaded Egypt and became familiar with the dissection known to the Egyptians. Herophilus described the vessels, the veins filled with blood and the arteries filled with blood and "pneuma", and he noted the difference in the walls of the two kinds of vessels. At the time of Celsus the ligature was advised as a last resort, only after the cautery and styptics had failed. Galen, during the decline and fall of the Roman empire, wrote a description of the circulation, remarkably close to the modern conception, and favored the cautery for hemostasis.

In the West, little progress was made until the fifteenth century. At that time gun powder was invented and the incidence of battle wounds increased for the army surgeon. The printing-press launched forth medical, surgical, and scientific texts, and for the first time there was a chance for the operator to study the notes of others, and knowledge was more widely disseminated. Different schools of thought sprang up and different points of view were taken; some held that wounds healed by suppuration, others by first intention. Among the later was Paré, accidental discoverer of the fact that a "digestive" aided wounds more than did the painful cautery. He modestly described his first cure by saying that, "I dressed him and God healed him". He also described the bec de corbin, a pinching instrument for holding blood vessels.

Morel is accredited with the invention, in 1674, of the twisted stick tourniquet. A spring was added to the bec de corbin and rolls of bandage were placed under the tourniquet to press on the great vessels. Amputation became more frequent and coagulation of the blood was described by Jones and Lawson.

Physick and Nathan Smith first had the courage to cut short the ends of their buckskin ligatures, contrary to the advice and teachings of Liston. The forceps were gradually improved and Kocher and Halstead gave their names to their designs. Soon it was realized that more than one or two clamps were necessary for an operation, and the technic improved. Then Lord Lister introduced asepsis and perfected the ligature by sterilization in dilute carbolic acid; the theory of asepsis having been supported by Pasteur and Koch. His experiments were thorough and the results satisfactory as is evidenced by our modern operative procedures.

Revealing these and many other facts, this text affords an opportunity for a pleasant and profitable adventure within the field of medical history.

C. H. Wies.